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ABSTRACT

A study examined whether dramatization exercises generated more interpretive and evaluative thought among students regarding theme and characterization within a short story than traditional methods of answering questions or writing an essay regarding the story. Subjects, 35 junior English students at a suburban southern California high school, were ranked according to grade point average, reading level, and the assessment of their academic abilities by their English instructor. Subjects were placed into three groups in a randomized block distribution. During one 61-minute class period, the three groups followed along in their textbooks as an oral reading of "Another April" by Jesse Stuart was played on a tape recorder. One group spent 20 minutes answering questions from their textbook, another group rehearsed and performed a 90-second two-character script depicting the climax of the same story in randomly assigned pairs, and the third group individually composed compare-contrast essays. During the final 20 minutes of the class period the students composed a written response to a writing prompt asking them to discuss the principal character's actions in a proposed situation unrelated to the story. Results indicated that the dramatization instructional methodology yielded no significantly superior results compared with the two more traditional written analysis techniques, yet the highest mean score was obtained by high achieving students engaged in the dramatization method of story analysis. Results also indicated that high achievers benefited more than low achievers from the dramatization technique. (Contains 21 references. Six appendixes of data are attached.) (RS)

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IMAGINATIVE PLAY AND LEARNING GAINS THROUGH DRAMATIZATION IN THE CLASSROOM

In a 1981 study conducted by Singer and Singer involving 141 middle class preschool children, it was observed that cognitive and imaginative skills taught to these children by their parents were transferred to the subjects' play activities. One of the questions for further study emanating from this research asks: If cognitive and imaginative skills can be taught to children and these skills applied by those children to their impromptu dramatizations in the world around them, is the inverse true? Can dramatizing promote imagination and cognition?

Applebee (1977) found that the amount of background knowledge students possess in a given domain correlates with their abilities to interpret within that same domain. And, it is understood that background knowledge emanates from experience. Taylor (1982) conducted research which indicated that the more extensive the familiarity with a subject, the greater the recall of information within that domain. In Taylor's research, students showed better recall of main ideas from text with which they were familiar and practiced.

Martinez (1983) found that a strong relationship existed between

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the literary experiences children had with their parents and the literary inferences they generated as they responded to story selections. And, again, children of high literary exposure (Lehr, 1988) have been observed generating abstract thought more proficiently than children of modest literary backgrounds in processing genres of children's literature.

The link between contextual experience and learning is undeniable. Illzes (1991) found that Hungarian students learning English vocabulary increased their vocabulary test scores by as much as 22% when the words were studied in context. Many (1991) carried out a study involving 43 fourth graders, 47 sixth graders, and 40 eighth graders, who were assigned three short stories and then asked to write "... anything you want about the story you just read," and given as much time as the students wished in which to complete their responses. Many determined that the aesthetic stance, represented by Levels 3 and 4 below, produced more in-depth understanding of text by her subjects than did the efferent stance, text processing at Levels 1 and 2.

Levels at which Many rated subject responses:

Level 1 - literal level.

Level 2 - interpretation of story events.

Level 3 - drawing of analogies between story events and world occurrences.

Level 4 - evaluative responses of story leading to a "generalized belief or understanding about life."

Note that Levels 3 and 4 directly relate to life experience.

It must be concluded that contextual experience within the realm of classroom learning promises significant learning gains. Logically, then, as educators grapple with the question of how to effectively contextualize language learning at the secondary level, dramatization surfaces as a viable instructional strategy. And, the question becomes: How much more will students learn as they develop empathetic contracts with story characters by acting out those characters, and, in so doing, experience increased visual, audio, and tactile stimulation, and become part of the protagonists and antagonists as well as secondary characters within a story? The study discussed herein makes an attempt to test the hypothesis that dramatization exercises within the secondary classroom generate more interpretive and evaluative thought among students regarding theme and characterization within a short story than do the traditional methods

of either answering knowledge, interpretive, and evaluative questions at the conclusion of the reading of a short story or writing an interpretive/evaluative essay regarding a short story.

METHOD

This study involved one classroom of 35 junior English students at a suburban Southern California high school. The students were ranked according to grade point average, reading level, and the assessment of their academic abilities by their English instructor. Each category was given equal weight in the determination of rank, and, then, the students were placed into three groups in a randomized block distribution.

Within a sixty-one minute class period, the experiment and assessment were conducted. Initially, the three treatment groups followed along in their textbook as an oral reading of Another April by Jesse Stuart was played on a tape recorder. This part of the experiment took approximately twenty minutes.

At the conclusion of the reading, the three groups engaged in different activities. Group 1 spent twenty minutes answering the "Study

and Discussion" questions for Another April in their literature anthologies. During the same time period, Group 2, the first experimental group, rehearsed and performed a 90-second two-character script depicting the climax of the same story in randomly assigned pairs. Group 3, the second experimental group, spent this interval individually composing compare-contrast essays discussing similarities as well as dissimilarities between the principal character of 'Grandpa' in the story and each subject's own grandfather or an elderly individual with whom a subject may have been well acquainted. Groups 1 and 3 completed their tasks within the same classroom while Group 2 rehearsed and then performed for one another in a separate classroom.

At the conclusion of the assignment interval, the three groups were re-united. The final twenty minutes of the class period engaged the students in the assessment portion of the experiment, composing a written response to a writing prompt asking the study subjects to discuss the principal character's actions in a proposed situation unrelated to the story. Subjects were additionally requested to list as many reasons as they could as to why they felt the behavior they anticipated would occur. The

resulting written responses were scored by two raters, and the scores averaged into one composite score, according to the six-point scale listed below:

Points	Standard
6	Conclusions are logical and evaluative, assessing the key character's personality with numerous references from the story.
5	Conclusions are logical and evaluative, assessing the key character's personality with some references from the story.
4	Conclusions are logical and evaluative but with few references from the story.
3	Logical conclusions are given but with two or less supporting statements.
2	Conclusions lack logic and/or supporting statements.
1	Conclusions totally lack logic and supporting statements, but subject correctly restates some of the details of the story.

The extent to which the subjects analyzed the story through interpretive and evaluative, critical thinking skills, as evidenced by their performance on the assessment prompt, comprised the dependent variable, while the independent variables regarded instructional technique

and ranged from the analysis of a short story by means of answering knowledge, interpretive, and evaluative questions in Group 1, to the acting out of principal story roles in Group 2, to addressing an evaluative writing prompt in Group 3. The null hypothesis for the experiment stated that the dramatization method of instruction would statistically render no significant results as compared to either of the written approaches to analysis practiced in Groups 1 and 3.

The composite scores on the assessment writing prompt were subjected to an Analysis of Variance Model as well as a General Linear Model for statistical analysis purposes. The results showed no marked distinctions between the two models. However, the results of the study are taken from the General Linear Model since the Group X Ability Table cells were unbalanced in that varying numbers of subjects participated in the Group X Ability categories (see Appendix A).

RESULTS

The study generated achievement scores for six cell groups (see Appendix A). Students were grouped into three treatments representing three teaching methodologies as previously explained, and then placed

into two categories per group, one category comprising the bottom half of the class rankings and the other category comprising the upper half of class rankings, labeled '0' and '1' respectively on the Table of Group by Ability (see Appendix F).

Note that the lower achievers represent 46% of the total number of subjects in the study as compared to 54% higher achievers. Methods 2 and 3 each represents slightly over a third of the total number of subjects while Method 1 is comprised of only 26% of the experiment participants. Numbers of participants stand at 3, 4, and 4 for column by row cells 11, 21, and 13, respectively, while the other three cells show 5 as the number of students participating. This creates a somewhat out-of-balance situation and, therefore, the General Linear Model of analysis was used in the study rather than an ANOVA model.

The study was conducted at an alpha level of .05 and a confidence level of .95 with 20 residual degrees of freedom (see Appendix D). Figures for the General Linear Model are listed in the table listed General Linear Models Procedure (see Appendix B). Note that the General Linear Model shows an R-square, between group variance, of only .12, which

indicates that the variability between methods is merely 12%. Generally, the R-square necessary to reject the null hypothesis would need to be at least .30.

The calculated F value for the model is .57 as compared to a F percentile value figure of 2.71, not nearly high enough to dispute the null hypothesis. The probability of arriving at an F value of .57 by chance will occur 72% of the time as shown under the "Pr>F" column on the model. This suggests an unreliable study and a low calculated F, already mentioned. It also supports the conclusion suggested by the .12 R-square that the null hypothesis should not be rejected.

The Type 1 sum of squares portion of the General Linear Model lists calculated F values of .56, 1.28, and .22, respectively, for Group, Ability, and Group by Ability as they were entered into the model sequentially. In order for the null hypothesis to be rejected, the F values would have had to exceed the F values given in the Percentiles of the F Distribution Table for an alpha of .05 of 3.49, 4.35, and 3.49, for Group, Ability, and Group by Ability, respectively, which they failed to do. And, again, the probabilities of arriving at the calculated F values given in the

model by chance are 58%, 27%, and 80% of the time for Group, Ability, and Group by Ability, respectively. Note that the most prominent challenge to the null hypothesis comes from the Ability portion of the model with a calculated F value far below the 4.35 necessary for rejection of the null hypothesis and yet given a probability of achieving the 1.28 calculated F value by chance of 27% of the time as compared to 58% for Group and 80% for Group by Ability.

The Type III sum of squares portion of the General Linear Model, wherein Group, Ability, and Group by Ability were listed according to their significance when added in to the model last, is no more encouraging toward a rejection of the null hypothesis than the Type I sum of squares portion. The calculated F values for Group, Ability, and Group by Ability are still markedly low at .59, 1.06, and .22, respectively, with needed F percentile values of 3.49, 4.35, and 3.49, respectively, for rejection of the null hypothesis.

Further proof of the need to retain the null hypothesis, $H_0: \text{Group} = 0$, is evidenced in Tukey's Method for Multiple Comparison Procedures, employed because comparing simple pairwise differences between means

was desired (see Appendix C). Tukey's comparisons indicated no significant differences between groups, or methods.

It becomes apparent that the null hypothesis must be retained and that no significant difference between instructional methodologies exists in this study. However, the mean scores given by Group and Ability on a six-point scale (see Appendix C) not only indicate higher achievement for the upper half of the class rankings for all three treatment groups at margins of .2, 1.0, and .4, for treatment groups 1, 2, and 3, respectively; but, the highest mean of 3.8, earned by the higher achievers within the experimental dramatization Group 2, was .4 above the next highest mean of 3.37, earned by the high achievers in Group 1. It is very possible, then, that with an n of 250 or larger, as compared to this pilot study n of only 26, that significant results could be obtained, indicating that the dramatization method of instruction yields superior results to the more traditional written analysis methods practiced by Groups 1 and 3 for at least high achievers.

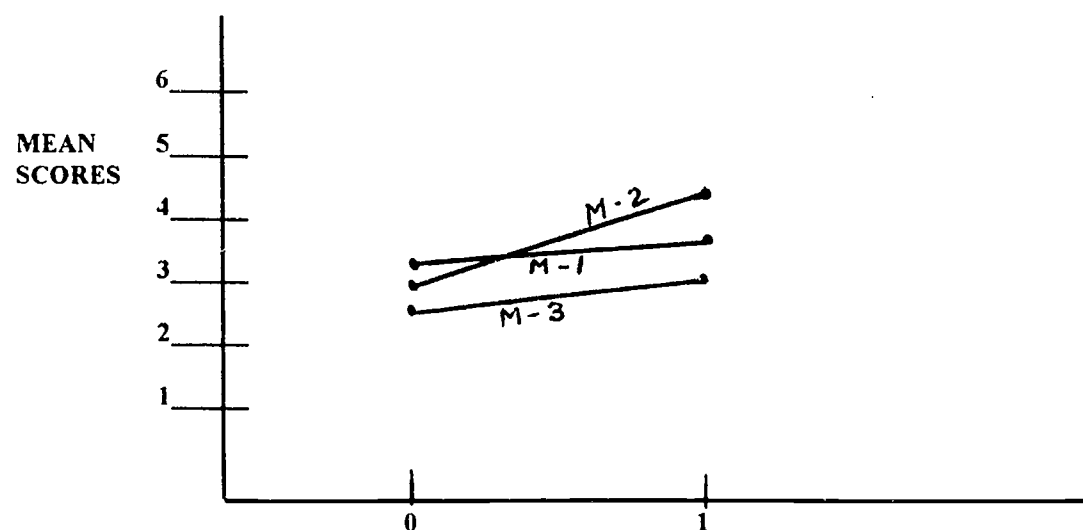
And, below are given a Row and Column Means table as well as a graph, Mean Scores for Instructional Methods by Ability Grouping,

comparing the relationships between achievement scores of high and low achievers by method.

TABLE 1-A: ROW AND COLUMN MEANS:

	ABILITY		ROW MEAN
METHOD GROUP	0	1	
1	3.17	3.38	3.28
2	2.8	3.8	3.3
3	2.5	2.9	2.7
COLUMN MEAN	2.82	3.36	3.09/3.09

GRAPH 1-B: MEAN SCORES FOR INSTRUCTIONAL METHODS BY ABILITY GROUPING:



ABILITY GROUPING

On horizontal axis:

0 - lower half of class rankings

1 - upper half of class rankings

Graphed:

M-1, M-2, M-3 correspond to treatment groups 1-3, respectively.

Note the significant interaction between Methods 1 and 2. Here the high achievers are seen to attain higher scores with Method 2, the dramatization technique, than their Method 1 counterparts, although there is the opposite situation occurring with low achievers.

CONCLUSION

Although the null hypothesis, $H_0: \text{Group}=0$, must be retained, indicating that the dramatization instructional methodology yields no significantly superior results as compared to the two more traditional written analysis techniques, yet the highest mean score was obtained by the high achievers engaged in the dramatization method of story analysis. Moreover, this score was .43 higher than the second highest score, obtained by high achievers assigned short-answer types of questions at the knowledge, interpretive, and evaluative levels of mental processing. This translates to an increase of 12 percent in scores for the dramatization method over the short-answer method for high achievers, the short-answer method having generated the next highest score. This suggests that the dramatization method may be proven significantly superior to the written

analysis methods represented by Groups 1 and 3 given a n far larger than the meager 26 used in the pilot study.

A second noteworthy finding in this study regards the interaction demonstrated by Graph 1-B. Here high achievers are shown to benefit more than low achievers from the dramatization technique. So, again, it becomes evident that a similar study with a n of 250 or greater might yield results showing dramatization to be a significantly superior teaching method to written analysis in the development of interpretive and evaluative thought generated through the analyzing process of a short story.

APPENDICES

APPENDIX A

TABLE OF GROUP BY ABILITY

GROUP

ABILITY

Frequency Percent Row Percent Column Percent	0	1	Total
1	3 11.54 42.86 25.00	4 15.38 57.14 28.57	7 26.92
2	5 19.23 50.00 41.67	5 19.23 50.00 35.71	10 38.46
3	4 15.38 44.44 33.33	5 19.23 55.56 35.71	9 34.62
TOTAL	12 46.15	14 53.85	26 100.00

GENERAL LINEAR MODELS PROCEDURE
Dependent Variable: SCORE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	4.85544872	0.97108974	0.57	0.7231
Error	20	34.15416667	1.70770833		
Corrected Total	25	39.00961538			
	R-Square	C.V.	Root MSE		SCORE Mean
	0.124468	42.20698	1.30679315		3.09615385

Source	DF	Type I SS	Mean Square	F Value	Pr > F
GROUP	2	1.92548840	0.96274420	0.56	0.5778
ABILITY	1	2.18018124	2.18018124	1.28	0.2719
GROUP*ABILITY	2	0.74977908	0.37488954	0.22	0.8048

Source	DF	Type III SS	Mean Square	F Value	Pr > F
GROUP	2	2.01661015	1.00830508	0.59	0.5635
ABILITY	1	1.80469961	1.80469961	1.06	0.3162
GROUP*ABILITY	2	0.74977908	0.37488954	0.22	0.8048

GENERAL LINEAR MODELS PROCEDURE

TUKEY'S STUDENTIZED RANGE (HSD) TEST FOR VARIABLE: SCORE

NOTE: This test controls the type I experimentwise error rate,
but generally has a higher type II error rate than REGWQ.

Alpha = 0.05 df = 20 MSE = 1.707708

Critical Value of Studentized Range = 2.950

Minimum Significant Difference = 1.0724

WARNING: Cell sizes are not equal

Harmonic Mean of cell sizes = 12.92308

Means with the same letter are not significantly different.

Tukey Grouping	Mean	N	Ability
A	3.3571	14	1
A			
A	2.7917	12	0

.....SCORE.....

Level of GROUP	Level of ABILITY	N	MEAN	SD
1	0	3	3.16666667	2.02072594
1	1	4	3.37500000	1.18145391
2	0	5	2.80000000	1.15108644
2	1	5	3.80000000	1.52479597
3	0	4	2.50000000	1.08012345
3	1	5	2.90000000	0.96176920

GENERAL LINEAR MODELS PROCEDURE

TUKEY'S STUDENTIZED RANGE (HSD) TEST FOR VARIABLE: SCORE

NOTE: This test controls the type I experimentwise error rate.

Alpha = 0.05 Confidence = 0.95 df = 20 MSE = 1.707708

Critical value of studentized range = 3.578

Comparisons significant at the 0.05 level are indicated by '***'.

GROUP COMPARISON		SIMULTANEOUS LOWER CONFIDENCE LIMIT	DIFFERENCE BETWEEN MEANS	SIMULTANEOUS UPPER CONFIDENCE LIMIT
2	- 1	-1.6150	0.0143	1.6436
2	- 3	-0.9413	0.5778	2.0969
1	- 2	-1.6436	-0.0143	1.6150
1	- 3	-1.1027	0.5635	2.2296
3	- 2	-2.0969	-0.5778	0.9413
3	- 1	-2.2296	-0.5635	1.1027

**GENERAL LINEAR MODELS PROCEDURE
CLASS LEVEL INFORMATION**

CLASS	LEVELS	VALUES
GROUP	3	1 2 3
ABILITY	2	0 1
NUMBER OF OBSERVATIONS IN DATA SET = 26		

APPENDIX F

RANKINGS OF SUBJECTS FOR GPA, INSTRUCTOR ASSESSMENT, AND READING LEVEL, WITH OVERALL RANKING COMPUTED

SUBJECT NUMBER	GPA/RANKING	INSTRUCTOR ASSESSMENT/ RANKING	READING LEVEL/ RANKING	OVERALL AVERAGE/ RANKING OF SUBJECTS
I	1.51 - 23	1	12.7 - 2	8.66 - 4
II	2.9 - 3	2	9.4 - 6	3.66 - 2
III	2.8 - 4	3	8.7 - 8	5 - 3
IV	2.9 - 3	4	8.7 - 8	5 - 3
V	1.58 - 22	5	9.4 - 6	11 - 8
VI	3.75 - 1	6	-----	3.5 - 1
VII	2.24 - 8	7	6.4 - 16	10.33 - 6
VIII	1.43 - 25	8	12 - 3	11.33 - 8
IX	2.05 - 10	9	8.1 - 10	9.66 - 5
X	1.8 - 17	10	8.3 - 9	12 - 10
XI	1.95 - 11	11	5.5 - 18	13.33 - 12
XII	1.6 - 21	12	12.9 - 1	11.33 - 8
XIII	1.37 - 26	13	-----	19.5 - 20
XIV	1.62 - 20	14	12.9 - 1	11.66 - 9
XV	2.45 - 6	15	-----	10.5 - 7
XVI	1.47 - 24	16	5.2 - 20	20 - 21
XVII	1.92 - 13	17	5.4 - 19	16.33 - 18
XVIII	1.85 - 15	18	7.8 - 11	14.66 - 15
XIX	1.83 - 16	19	8.7 - 8	14.33 - 14
XX	1.65 - 19	20	10.4 - 5	14.66 - 15
XXI	2.16 - 9	21	5.6 - 17	15.66 - 17
XXII	1.65 - 19	22	11.4 - 4	15 - 16
XXIII	2.68 - 5	23	10.4 - 5	11 - 8
XXIV	1.94 - 12	24	6.7 - 15	17 - 19
XXV	0.95 - 29	25	-----	27 - 28
XXVI	0.88 - 30	26	-----	28 - 29
XXVII	1.16 - 27	27	7.0 - 14	22.66 - 25
XXVIII	-----	28	-----	28 - 29
XXIX	1.0 - 28	29	7.4 - 12	23 - 26
XXX	0.8 - 31	30	7.4 - 12	24.33 - 27
XXXI	1.0 - 28	31	8.9 - 7	22 - 23
XXXII	2.35 - 7	32	-----	19.5 - 20
XXXIII	3.05 - 2	33	12.7 - 2	12.33 - 11
XXXIV	1.67 - 18	34	6.7 - 15	22.33 - 24
XXXV	1.9 - 14	35	7.2 - 13	20.66 - 22

REFERENCES

- Afflerbach, P. (1990). The influence of prior knowledge on expert readers' main idea construction strategies. Reading Research Quarterly, 25, 31-46.
- Beach, R., & Wendler, L. (1987). Developmental differences in response to a story. Research in the Teaching of English, 21(3), 286-297.
- Brophy, J. (1988). Research on teacher effects: uses and abuses. Elementary School Journal, 89(1), 3-22.
- Galda, L. (1990). A longitudinal study of the spectator stance as a function of age and genre. Research in the Teaching of English, 24(3), 261-278.
- Glass, G.V., McGaw, B., & Smith, M.L. (1981). Meta-analysis in Social Research. Beverly Hills: Sage.
- Graves, D. H. (1983). Writing: Teachers and Children at Work. New York: Heinemann Education.
- Hynds, S. D. (1985). Interpersonal cognitive complexity and the literary response processes of adolescent readers. Research in the Teaching of English, 19(4), 386-401.
- Illzes, K. (1991). Lexical guessing in isolation and context. Journal of Reading, 34(5), 360-365.
- Kardash, C. A., & Wright, L. (1987). Does Creative Drama Benefit Elementary School Students? A Meta-analysis. Youth Theatre Journal, 1(3), 11-18.
- Kase-Polisini, J. (1989). The Creative Drama Book: Three Approaches. New Orleans: Anchorage.
- Knudson, R. E. (1988). The effects of highly structured versus less structured lessons on student writing. The Journal of Educational Research, 81(6), 365-368.
- Knudson, R. E. (1989). Effects of instructional strategies on children's informational writing. The Journal of Educational Research, 83(2), 91-96.
- Lehr, S. (1988). The child's developing sense of theme as a response to literature. Reading Research Quarterly, 23(3), 337-357.
- Many, J. (1991). The effects of stance and age level on children's literary responses. Journal of Reading Behavior, 23(1), 61-85.
- Moore, B. H., & Coldwell, H. (1990). The art of planning: drama as rehearsal for writing in the primary grades. Youth Theatre Journal, 4(3), 13-20.

REFERENCES(Continued)

- Pellegrini, A. D. (1982). Symbolic functioning and children's early writing: the relations between kindergarteners' play and isolated word-writing fluency. In R. Beach, & L. S. Bridewell (Eds.), New Directions in Composition Research (pp. 274-284). New York: Guilford.
- Pellegrini, A. D., & Galda, L. (1982). The effects of thematic-fantasy play training on the development of children's story comprehension. American Educational Research Journal, 19, 443-452.
- Singer, J., & Singer, D. (1981). Television and reading in the development of imagination. Children's Literature, 9, 126-136.
- Taylor, J. L., & Walford, R. (1972). Simulation in the Classroom. Baltimore: Penguin Books Ltd.
- Wagner, B. J. (1986). The effects of Role Playing on Written Persuasion: an age and channel comparison of fourth and eighth graders. Dissertation-University of Illinois at Chicago. Ann Arbor: UMI.
- Yawkey (1980). Research shows play related to reading growth. Key Communications Newsletter, 2(1).